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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,786	08/28/2003	Tamon Kasajima	033211-038	5596

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EXAMINER

EVANS, JEFFERSON A

ART UNIT PAPER NUMBER

2652

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/649,786

Applicant(s)

KASAJIMA ET AL.

Examiner

Jefferson A. Evans

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8 and 11 is/are rejected.
- 7) ☒ Claim(s) 3,6,9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Claims 1 to 11 are pending.

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Specification***

2. The title of the invention is not adequately descriptive. A new title is required that is more clearly indicative of the invention to which the claims are directed by making reference to the metal layers parallel to the plane of the coil conductor for lowering the impedance of the coil conductor.

***Claim Objections***

3. Claims 1 to 11 are objected to because of the following informalities:

A...claim 1 sets forth the first and second magnetic poles and the yoke as if they are separate structures that are magnetically connected. This runs counter to the remainder of the disclosure which sets forth the poles as being parts of the yoke rather than separate therefrom. It is noted that the poles are not given separate reference characters. In figure 6 for example, and the associated description at page 10 of the specification, reference numeral 21 points to structure that would appear to correspond to the claimed poles, however the specification says that reference numeral 21 denotes the yoke and then says that the yoke includes first and second magnetic poles. The claim language should be amended to be more consistent with the specification.

B...claim 1 – line 3, “separated with” should be -- separated from --.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 7, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Stover et al (U.S. 5,198,948). Stover discloses a thin film magnetic head comprising an insulation gap (88); first (66) and second (68) magnetic poles separated from each other by said insulation gap; a yoke magnetically connected to said first and second magnetic poles (for this rejection the yoke could be considered the vertical portion connecting the horizontal pole portions as shown in figures 9 and 10); at least one coil conductor (64) wound around said yoke by a plurality of turns; and at least one metal (92,94) layer in the form of a shield arranged near said at least one coil conductor in parallel with a plane of said at least one coil conductor, the metal layer including gold (column 5 – lines 3 to 9). Stover does not indicate that the metal layers are grounded.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stover et al in view of Brug et al (U.S. 5,930,087). Stover does not indicate that his metal shield layers are grounded.

Brug discloses that a magnetic shield may be grounded to avoid electrical short circuits (column 3 – lines 50 to 63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to ground the metal shield layer of Stover. The motivation would have been: to prevent undesired electrical shorting.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stover et al. Stover does not disclose the trace arrangement of the embodiment of figure 9.

Official Notice is given that it was notoriously old and well known in the art to have traces which connect to a coil not penetrate a shield layer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Stover with traces that do not penetrate the shields. The motivation would have been: to avoid increasing the complexity level of the thin film magnetic head structure of Stover by requiring the formation of apertures in the shields and forming the traces to extend through the apertures.

#### ***Allowable Subject Matter***

9. Claims 3, 6, 9, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson A. Evans whose telephone number is 571-272-7574. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'JAE' followed by a stylized, cursive flourish.

JAE  
May 1, 2005

Jefferson A. Evans  
Primary Examiner  
Art Unit 2652

**JEFFERSON EVANS  
PRIMARY EXAMINER**